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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/815,440	03/22/2001	Steven M. Bennett	5038-87	5232

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EXAMINER

OPSASNICK, MICHAEL N

ART UNIT	PAPER NUMBER
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2655

DATE MAILED: 01/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/815,440

Applicant(s)

BENNETT ET AL.

Examiner

Michael N. Opsasnick

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– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,6-8,10-12,15,16,18-20,22,25,26 and 28-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,6-8,10-12,15,16,18-20,22,25,26,28-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/12/2004 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 29 and 30 are rejected under 35 U.S.C. 102(e) as being anticipated by Junqua et al (6415257).

As per claims 29,30, Junqua et al (6415257) teaches a speech recognition system comprising:

a) At least two speech models (Col 2, Line 60).

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- b) A control module (Figure 1, See 10,12,14,24) operable to:
 - i. Determine context information about a call (Col 3, Line 8)
 - ii. Select one of at least two speech models as a selected default speech model based on the context information [grammar] (Col.3, Line 12).
 - iii. Configure a speech recognizer to use the selected model (Col.10, Line 55).
 - iv. Dynamically identifying whether a new speech model has the better fit to the initial information *[based on communication channel and/or user characteristics]* (Col 10, Line 55, Col 11,Lines 25 - 44, Col 12, Line 36 -66).
 - v. If so, associating the model having a best fit with the mapping target as a default model (Col 12, Line 1).

- c) A recognition engine operable to:
 - i. Receive an input speech stream (Col 2, Line 36).
 - ii. Receive information about which speech model to use from the control module (Col 2, Line 46 - Line 60).
 - iii. Convert an input speech stream to an output text stream using the model (Col 5, Line 16).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 2, 6 - 8, 11, 12, 15, 16, 18 - 20, 22, 25, 26 & 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sherwood (US 6212498) in view Sharma et al. (U.S. Patent 6480825).

Regarding claim 1, Sherwood discloses an enrollment method where a user utterance and determining the content of a user utterance and determining whether the utterance matches a portion of the enrollment text. Sherwood does not explicitly disclose determining initial information and mapping target, mapping the initial information to at least one model, identifying a model having a best fit to the initial information, associating the model having a best fit with the mapping target as a default model. However, Sharma et al. discloses a method for speaker recognition where the method comprises:

- a. Determining initial information associated with an input speech (Col 10, Line 25).
- b. Mapping the initial information to at least one model (Col 1, Line 38).

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- c. Dynamically identifying whether a new speech model has the better fit to the initial information [based on communication channel and/or user characteristics] (Col 10, Line 55, Col 11, Lines 25 - 44, Col 12, Line 36 66).
- d. If so, associating the model having a best fit with the mapping target as a default model (Col 12, Line 1).

The ability to choose the best model fit would have improved results in a speaker/speech recognition system. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Sherwood et al. to items a, b, c & d as taught by Sharma et al. since the ability to choose the best model fit would have improved results in a speaker/speech recognition system (Sharma (6480825), col. 5 lines 40-50).

As per claim 2, Sherwood does not explicitly teach user and personal characteristics of the mapping target, however, Sharma et al. disclose a mapping target further comprises at least one of a user, personal characteristics of the user and communication channel characteristics (Sharma, Col 13, Line 60, Col 11, Lines 25 - 44, Col 12, Line 36 - 66)). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Sherwood et al reference to include mapping targets that included personal information because it would advantageously improve the accuracy of the recognition system (Sharma, col. 3 lines 35-45).

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As per claims 6, 20 & 26, Sherwood does not explicitly teach types of communication channels, however, Sharma et al. disclose that the communication channel characteristics will comprise of at least one from the group comprised of: type of connection, model of phone, network identifiers, network characteristics and background noise level (Sharma, Col 13, Line 63). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Sherwood et al reference to be used for specific applications because, for example, the system could be tailored for a home-detention system (Sharma, col. 13 lines 60-65).

As per claim 7, Sherwood does not explicitly teach mapping into alternate models, however, Sharma et al. disclose a method that further associates at least one alternative model with the mapping target from the mapped models. Sharma et al. describe that during the verification process, a password of the users are stored and verified against a stored version [mapping process]. In addition, the communication channel characteristics [alternative model] are also stored and verified against a version that was stored during enrollment and linked to the password data (Col 14, Line 25). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Sherwood et al reference for model adaptation because it would improve upon the accuracy of verification system (Sharma, col. 14, lines 30-40).

As per claims 8,11,12, 15, 16,18, 19, 22, 25 & 28, Sherwood disclose an enrollment method where a user utterance and determining the content of a user utterance and determining whether the utterance matches a portion of the enrollment text [automatic speech *recognition*].

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Sherwood does not explicitly disclose determining initial information and mapping target, mapping the initial information to at least one model, identifying a model having a best fit to the initial information, associating the model having a best fit with the mapping target as a default model. However, Sharma et al. disclose a method for speaker recognition where the method comprises:

- a. Receiving a call from a user and later identifying of user (Col 3, Lines 46 - Lines 65).
- b. Determining characteristics of a communication channel through which the call is received (Col 3, Lines 46 - Lines 65).
- c. Selecting a default speech model based upon the characteristics of the channel (Col 3, Lines 50 - Lines 64);
- d. Configuring a speech recognizer to use the default speech model;
- e. Dynamically identifying whether a new speech model has the better fit to the initial information [based on communication channel and/or user characteristics] (Col 10, Line 55, Col 11, Lines 25 - 44, Col 12, Line 36 - 66).
- f. If so, associating the model having a best fit with the mapping target a default model (Col 12, Line 1).

The ability to choose the best model fit would have improved results in a speaker/speech recognition system. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Sherwood et al. to items a, b, c, d, e & f as taught by Sharma

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et al. since the ability to choose the best model fit would have improved results in a speaker/speech recognition system (Sharma, col. 4 lines 40-50).

6. Claims 4 & 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sherwood et al. (U.S. Patent 6212498) in view of Sharma et al. (U.S. Patent 6480825) as applied to claims 2 and 8 above, and further in view of Junqua et al. (U.S. Patent 6415257).

As per claims 4 & 10, the combination of Sherwood et al. (U.S. Patent 6212498) in view of Sharma et al. (U.S. Patent 6480825) do not disclose the personal characteristics that include gender, native language, age, ethnicity and home region. However, Junqua et al. (U.S. Patent 6415257) teaches the use of identifying the age of certain users so that channels can be blocked (Col 3, Line 1). The identity of the user is necessary information can be selectively limited e.g. blocking a child's access to a television channel. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Sherwood in view of Sharma et al. to include the age, gender, etc. of the user as taught by Junqua et al. since it would have selectively limit/give access to users based on characteristics related to age, gender, etc. (Junqua et al. (U.S. Patent 6415257), col. 3 lines 1-5).

Response to Arguments

7. Applicant's arguments filed 10/12/2004 have been fully considered but they are not persuasive.

As per the applicant's arguments on page 9 with respect to the col. 3 passage of Junqua, examiner argues that the selected passage of Junqua refers to one set of pre-defined grammars for a particular user, and a second set of grammars open to all users, and the user-based set is chosen based upon the semantics of the user input (col. 3 lines 6-10).

As per the applicant's arguments that there is no relationship between the models mentioned in cols. 3 and 10, examiner disagrees and argues that the col. 3 reference teaches the use of the default user-defined models, and that the referenced col. 10 model refers to the newly updated model via speaker adapted, which is dynamically altered based upon new context information for each time the system is used by that particular user.

As per the applicant's arguments on page 10 regarding Sherwood, examiner disagrees and argues that nowhere does the examiner state that Sherwood does not explicitly teach the elements of the independent claims listed. The above office action clearly states that Sherwood discloses an enrollment method requiring user utterances, determining the content of a user utterance, and determining whether the utterance matches a portion of the enrollment text. The Sherwood reference is relevant to applicants claimed invention pertaining to speech recognition and determining user content of an utterance. The elements of Sharma that are relied upon relate to the measuring of an existing model and determining whether or not updating the model is necessary or prudent. For example (and addressing applicant's arguments on page 11 of the

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response), examiner points to the previously referred to section of Sharma (col. 12, line 1), wherein the combined set of speech characteristics represent the updated model as determined by the comparison process detailed in column 11 of Sharma.

Conclusion

8. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872 9314,

(for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal

Drive, Arlington. VA., Sixth Floor (Receptionist).


9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Opsasnick, telephone number (703)305-4089, who is available Tuesday-Thursday, 9am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Doris To, can be reached at (703)305-4827. The facsimile phone number for this group is (703)872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 2600 receptionist whose telephone number is (703) 305-4750, the 2600 Customer Service telephone number is (703) 306-0377.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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DAVID L. OMETZ
PRIMARY EXAMINER